

Insect repellents may lose effectiveness over a few hours, or may be washed away by the rain, sweating or swimming, and must then be reapplied. Don't overuse insect repellent! When it's too hot to wear heavy clothing to protect yourself, try wearing a lighter weight long-sleeved shirt and long pants, and spray repellent on your clothes instead of on you. **BE SURE TO READ THE LABEL CAREFULLY AND FOLLOW ITS INSTRUCTIONS.** Repellents can harm certain fabrics and are solvents of paints, varnishes and plastics. Though millions of people have used repellents without a negative reaction, people with known or suspected metabolic disorders should check with their physicians before using a repellent containing DEET.

5. **Eliminate mosquito breeding places on your property:** Look on your property to locate any possible breeding places. Look for any place standing water can collect, such as old tires, kiddie pools, clogged gutters, wheelbarrows, etc. Keep these places clean and empty. Change water in pet dishes daily, and in birdbaths twice weekly.
6. **"Do-it-yourself" mosquito control:** There are some pesticide formulations available for the do-it-yourselfer to apply in and around buildings. Only pesticides labeled for mosquitoes should be used. Follow all label and technical literature instructions. Concentrate your efforts in cool, damp, shady areas. Bear in mind that these pesticides will only get rid of the mosquitoes that are on that spot that you sprayed. They have no residual effect. That is, they will not kill a mosquito that flies from your neighbor's yard a few hours later, even if that mosquito lands on the place that

you sprayed. Do-it-yourself mosquito control may be effective to clear your yard of mosquitoes for occasional events, such as a day of working in your garden, or before an outdoor party. Do-it-yourself mosquito spraying is **not** a substitute for a community-based mosquito control program or the personal protection measures outlined above.

Some other tips: Should a mosquito get into your home, swat it. Keep an eye on your pets: domestic short-haired pets often carry mosquitoes into the house. Eliminate unnecessary trips in and out of the house. If many mosquitoes are inside your house, you may wish to use an aerosol spray labeled for this purpose only, and spray the upper three feet of the room.

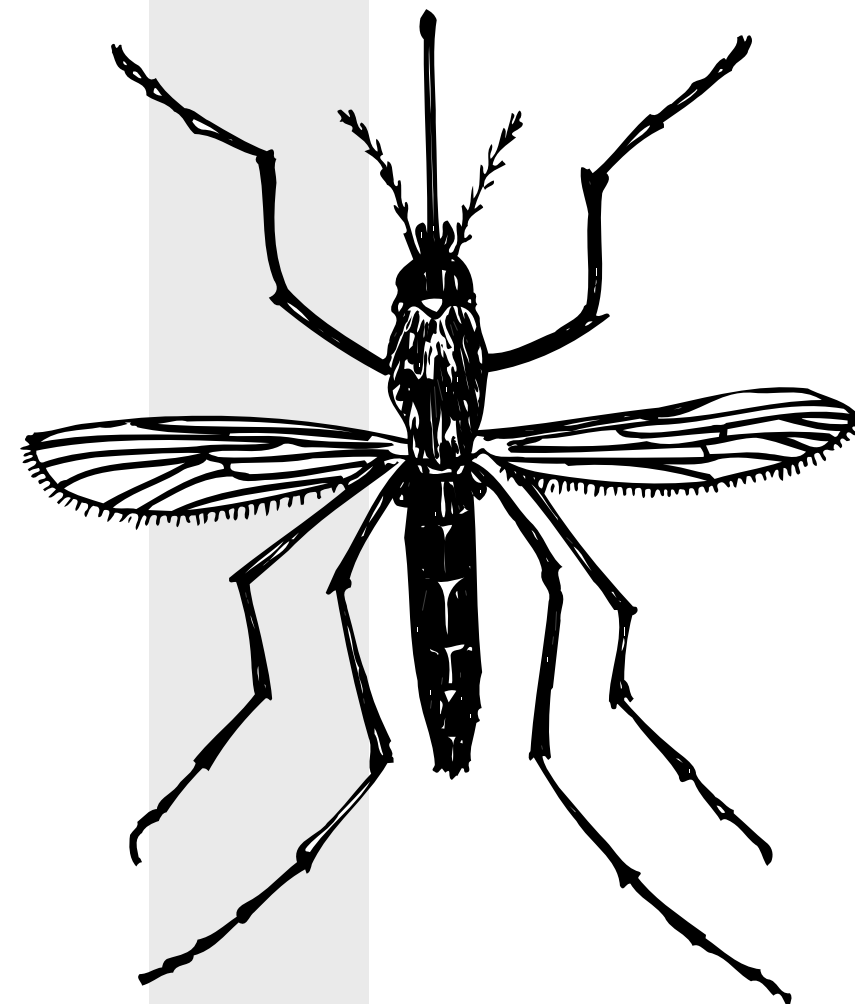
If mosquitoes still bother you: If you are sure that you have taken sufficient action to minimize mosquitoes around your home, but you are continually bothered by them, the source may be distant from your home. Contact your local mosquito program, your local county health department or the South Carolina Department of Health and Environmental Control, Division of General Sanitation, for additional information or assistance.



Division of General Sanitation
ML#012032 PC 11/00

Mosquito

Facts



Environmental Health/Vector Control

Mosquito Facts

All mosquitoes need water in which to pass their early life stages. Adult flying mosquitoes frequently rest in grass, shrubbery, or other vegetation, but they never develop there.

Different kinds of mosquitoes may be recognized by the type of water in which they lay their eggs.

Only female mosquitoes bite. She needs a blood meal to produce eggs. Male mosquitoes feed on plant juices.

Some species of mosquitoes will bite at any time of the day, while others prefer to bite after sunset.

Mosquitoes are attracted to humans by the carbon dioxide we breathe out, by other odors such as perfume, hair spray, deodorant, etc., and by the color of our clothing.

Most importantly, mosquitoes transmit diseases to humans, their pets and their livestock. The most common diseases in the U.S. are the viral encephalitides such as Eastern Equine Encephalitis, St. Louis Encephalitis, LaCrosse Encephalitis, West Nile Virus, etc., and Dog Heartworm. Worldwide, mosquito borne diseases are malaria, dengue, and yellow fever. Infections happen only if the mosquito bites an infected person, gets the disease itself, and then bites another person and gives him the disease.

Mosquitoes do not transmit HIV/AIDS.

Biology

Mosquitoes lay their eggs in three types of water environments.

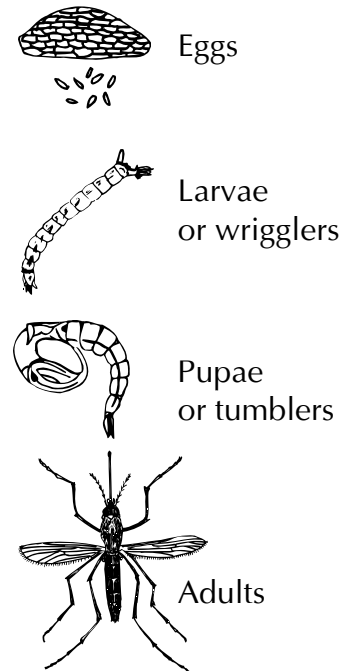
1. Containers (a type of floodwater) where the mosquito lays her eggs on the sides of the container. When the container is filled with rainwater or other means of watering, the eggs hatch. Most of these mosquitoes stay within 100 feet of their breeding site.
2. Flood waters where the eggs are laid on moist soil that is flooded by rising streams and rivers. The eggs hatch when the area is flooded. Adult mosquitoes of this type can fly great distances, as far as twenty miles.
3. Permanent waters such as ponds and lakes where the eggs are laid directly on the water.

The eggs hatch into larvae or wrigglers that go through four stages in the water.

Larvae change into pupae or tumblers. Pupae also must develop in water.

Adults emerge and seek vegetation on which to dry out. Then, they feed and mate. After mating, the female then flies off in search of a blood meal. The time it takes for a mosquito to go from egg to adult can be as short as 5 days in hot, humid weather. The adult female can live only a few days or as long as a few weeks, depending on the temperature.

Mosquito Life Cycle



Protect Yourself From Mosquitoes

Avoid mosquitoes. If you're going to be outdoors, pick an open, sunny spot away from trees, bushes, or high grass where mosquitoes might be hiding. Avoid going out unprotected at night or on cool or overcast days.

Put a Barrier Between You and the Mosquitoes

1. **Screens:** Ordinary window screens with 14 to 18 meshes to the inch will keep out mosquitoes. Screens should be kept in good repair.
2. **Mosquito-proof clothing/bedding:** Wear a wide-brimmed hat, long-sleeved shirt and long pants tucked into socks. Clothing of tightly woven fabrics offers protection against mosquito bites. To protect infants, use mosquito netting made of cotton or nylon with 23 to 26 meshes per inch. White is the best, as any mosquitoes can be seen easily and killed.
3. **Make yourself less attractive to mosquitoes:** Avoid wearing perfume or scented products. Wear light-colored clothing rather than dark when spending time outdoors.
4. **Use an insect repellent:** Products containing approximately 30% DEET have been shown to be very effective. Do not apply to the hands of young children. For children, apply products containing 15% or less of DEET. Don't apply repellents to the eyes, lips or other mucus membranes, or on the skin that is cut, abraded or has a rash.